

## CLAIMS

- 1 1. A method comprising:
  - 2 generating a control signal from a composite data enable signal; and
  - 3 separating a composite data signal into a video data signal and an auxiliary data signal
  - 4 using the control signal.
- 1 2. The method of claim 1 further comprising:
  - 2 indicating a capability to process the composite data signal.
- 1 3. The method of claim 1 further comprising:
  - 2 receiving an encoded data signal; and
  - 3 decoding the encoded data signal into the composite data enable signal and the composite
  - 4 data signal.
- 1 4. The method of claim 1 further comprising:
  - 2 determining whether the auxiliary data signal contains an error.
- 1 5. The method of claim 4 wherein the auxiliary data signal contains an error, further
  - 2 comprising:
    - 3 correcting the error in the auxiliary data signal.
- 1 6. An apparatus comprising:
  - 2 a control device to generate a control signal from a composite data enable signal; and
  - 3 a demultiplexor to separate a composite data signal into a video data signal and an
  - 4 auxiliary data signal using the control signal.
- 1 7. The apparatus of claim 6 further comprising:

2 an indicator to indicate a capability to process the composite data signal.

1 8. The apparatus of claim 6 further comprising:

2 a decoder to receive an encoded data signal, and to decode the received data signal into  
3 the composite data enable signal and the composite data signal.

1 9. The apparatus of claim 6 further comprising:

2 an error detector to determine whether the auxiliary data signal contains an error.

1 10. The apparatus of claim 9, further comprising:

2 an error corrector to correct an error in the auxiliary data signal.

1 11. An apparatus comprising:

2 means for generating a control signal from a composite data enable signal; and  
3 means for separating a composite data signal into a video data signal and an auxiliary  
4 data signal using the control signal.

1 12. The apparatus of claim 11 further comprising:

2 means for indicating a capability to process the composite data signal.

1 13. The apparatus of claim 11 further comprising:

2 means for receiving an encoded data signal; and

3 means for decoding the received data signal into the composite data enable signal and the  
4 composite data signal.

1 14. The apparatus of claim 11 further comprising:

2 means for determining whether the auxiliary data signal contains an error.

1 15. The apparatus of claim 14 further comprising:

2 means for correcting an error in the auxiliary data signal.

1 16. A method comprising:

2 generating a control signal from a video data enable signal and an auxiliary data enable  
3 signal; and

4 combining an auxiliary data signal and a video data signal into a composite data signal  
5 using the control signal.

1 17. The method of claim 16 further comprising:

2 receiving an indication signal to indicate a capability to process the auxiliary data signal;  
3 and

4 generating an auxiliary data permitted signal to permit the auxiliary data signal to be  
5 combined with the video data signal in response to the indication signal.

1 18. The method of claim 16 further comprising:

2 generating a composite data enable signal from the video data enable signal and the  
3 auxiliary data enable signal;  
4 encoding the composite data signal and the composite data enable signal into an encoded  
5 data signal; and  
6 transmitting the encoded data signal.

1 19. The method of claim 16 further comprising:

2 adding error detection data to the auxiliary data signal.

1 20. The method of claim 19 further comprising:

2 adding error correction data to the auxiliary data signal.

1 21. A transmitter for transmitting video data and auxiliary data comprising:

2 a transmitter control logic device having an input to receive an auxiliary data enable  
3 signal and an input to receive a video data enable signal, the transmitter control logic device to  
4 generate a control signal using the auxiliary data enable signal and the video data enable signal,  
5 and to combine the auxiliary data enable signal and the video data enable signal into a composite  
6 data enable signal; and

7 a multiplexer having an input to receive an auxiliary data signal, an input to receive a  
8 video data signal, and an input to receive the control signal from the transmitter control logic  
9 device, the multiplexer to combine the auxiliary data signal and the video data signal into a  
10 composite data signal in response to the control signal.

1 22. The transmitter of claim 21 further comprising:

2 an encoder having an input to receive the composite data enable signal and an input to  
3 receive the composite data signal, the encoder to encode the composite data enable signal and the  
4 composite data signal into an encoded data signal and to transmit the encoded data signal.

1 23. The transmitter of claim 21 further comprising:

2 an auxiliary data control logic device having an input to receive a display property signal  
3 indicating that auxiliary data can be processed, the auxiliary data control logic device to generate  
4 an auxiliary control signal in response to the display property signal, the auxiliary control signal  
5 to control the reception of the auxiliary data enable signal by the transmitter control logic device  
6 or to control the reception of the auxiliary data signal by the multiplexer.

1 24. The transmitter of claim 21 further comprising:

2           a packet formatting logic device having an input to receive the auxiliary data signal, the  
3    packet formatting logic device to format the auxiliary data signal to include error detection and  
4    correction and to output the auxiliary data signal including the error detection and correction data  
5    to the multiplexer.

1    25.    A receiver for receiving video data and auxiliary data comprising:  
2           a receiver control logic device having an input to receive a composite data enable signal,  
3    the receiver control logic device to separate the composite data enable signal into an auxiliary  
4    data enable signal and a video data enable signal, and to generate a control signal using the  
5    composite data enable signal; and

6           a demultiplexer having an input to receive a composite data signal and an input to receive  
7    the control signal from the receiver control logic device, the demultiplexer to separate the  
8    composite data signal into an auxiliary data signal and a video data signal based on the control  
9    signal.

1    26.    The receiver of claim 25 further comprising:  
2           a decoder having an input to receive an encoded data signal, the decoder to decode the  
3    encoded data signal into a composite data signal and a composite data enable signal.

1    27.    The receiver of claim 25 further comprising:  
2           a display property device to output a display property signal to indicate that the receiver  
3    can process auxiliary data.

1    28.    The receiver of claim 25 further comprising:

2 an error detection and correction logic device having an input to receive the auxiliary data  
3 signal from the demultiplexer, to determine whether the auxiliary data signal contains an  
4 error, and if the auxiliary data signal contains an error, to correct the error.

1 29. A method comprising:  
2 receiving a composite data enable signal having a first data enable pulse and a second  
3 data enable pulse;  
4 determining a first duration corresponding to the first data enable pulse;  
5 determining a second duration corresponding to the second data enable pulse; and  
6 identifying a video data enable signal and an auxiliary data enable signal based on the  
7 first and second durations.

1 30. The method of claim 29 wherein identifying further comprises determining which  
2 duration is longer.

1 31. The method of claim 30 wherein the video data enable signal is identified by the longer  
2 duration.

1 32. The method of claim 29 further comprising:  
2 receiving a composite data signal; and  
3 separating the composite data signal into a video data signal and an auxiliary data signal  
4 based on the video data enable signal and the auxiliary data enable signal.

1 33. A method comprising:  
2 receiving a composite data enable signal having a pulse;  
3 determining a duration of the pulse;

identifying a video data enable signal in the pulse based on the duration; and identifying an auxiliary data enable signal in the pulse based on the duration.

- 1 34. The method of claim 33 further comprising:
- 2 receiving a composite data signal;
- 3 identifying a video data signal in the composite data signal using the video data enable
- 4 signal; and
- 5 identifying an auxiliary data signal in the composite data signal using the auxiliary data
- 6 enable signal.